HAZARDOUS DRUGS: ADMINISTRATION, HANDLING AND DISPOSAL	**CS-04-02-01**	**Page 1 of 9**
Related terms: Cytotoxic Drugs, Antineoplastic Drugs	**Date Established:** October 2006	**Dates Revised:** May 2008 May 2011 September 2011 Februrary 2013
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RATIONALE

To provide direction for the safe handling, administration and disposal of hazardous drugs.

To ensure the safety of clients and staff exposed to hazardous drugs and to reduce environmental contamination.

APPLICABILITY All health care providers.

DEFINITION

Hazardous Drug: Drugs that are known to be a human mutagen, carcinogen, teratogen, reproductive toxicant or actively toxic to an organ system. These drugs are also known as biohazardous or cytotoxic drugs. All antineoplastic drugs are hazardous drugs.

Antineoplastic Drug: Hazardous drugs that are used to inhibit or prevent the growth and/or spread of malignant cells or neoplasms. Some antineoplastic drugs can be used at reduced doses to treat non-malignant conditions, such as rheumatoid arthritis, psoriasis, etc. Antineoplastic drugs are also known as cytotoxic drugs and are commonly referred to as chemotherapy.

Biohazardous Drug: A drug containing an organic source such as viruses, bacteria, and fungi and the toxins produced by these organisms.

Cytotoxic Drug: Drugs which are directly toxic to cells, inhibiting or preventing their reproduction and/or growth. Antineoplastic drugs are cytotoxic and require identification as such.

Body Waste: Waste excreted by or originating from a client's body (e.g. urine, feces, blood).

Body Waste, Contained:	Body waste that is contained within a holding vessel, absorbed into a material or restricted in such a manner that it cannot expand or be dispersed (e.g. incontinent product).
Body Waste, Uncontained:	Body waste that could spread or be dispersed **(**e.g. emesis, diarrhea).
Contaminated Material:	Any substance that has been in direct contact with a hazardous drug including, clothing, laundry, gloves, medication administration sets, and/or a disposable protective field etc. Contaminated material also includes excreted body waste. Body waste will be considered contaminated for 48 hours following the last dose of cytotoxic medication unless otherwise specified on the Cytotoxic Drug List available from Pharmacy.
Handling:	Any activity where a hazardous drug or its container is in contact with individuals, including transportation, preparation, administration, storage, waste disposal or clean up.
Personal Protective Equipment (PPE):	Equipment worn by staff to minimize exposure to work-related hazards.
Respirator	A type of PPE worn over the nose and mouth designed to filter out very small particles (e.g. N95)

POLICY

Staff who are required to handle, or be in contact with hazardous drugs must be alerted to the potential risk. RNs/LPNs will note this on the *Care Plan* as well as the special handling precautions.

1. Staff must familiarize themselves with the hazards of the drugs they are handling and will be responsible for following the policies and procedures.

2. Male or female staff who are actively trying to conceive a child or female staff who are pregnant or breastfeeding, may request the option of temporarily refraining from handling hazardous drugs and/or their contaminants. These requests will be referred to Employee Health and Safety for a risk analysis and a recommendation regarding workplace accommodation.

3. A current list of hazardous drugs will be maintained in the Pharmacy. The list will be updated as needed and reviewed annually.

4. Antineoplastic drugs will be identified by a cytotoxic hazard symbol and other hazardous drugs will be identified with a Caution Note.

5. Staff who handle hazardous drugs will have access to information and resources on:

   - identification of health risks
   - safe handling of drugs and administration devices
   - use of Personal Protective Equipment
   - disposal
   - preventing and managing an accidental exposure
   - procedures for spill clean up

6. Personal protective equipment appropriate to the hazard risk is required when handling hazardous drugs. See Appendix 1**.**

7. Hazardous drugs are not to be kept as unit stock in client care areas.

8. Avoid crushing tablets or opening capsules.

9. Hazardous drugs will be labeled appropriately, transported and stored in secure, leak proof containers (plastic baggies or rigid plastic containers).

10. Human waste can be safely disposed of via the sewer system. All other liquid and solid contaminants such as disposable incontinent supplies should be disposed of in a leak-proof biohazard container. Contaminated laundry can be placed in laundry bags as usual.

11. In the event of a spill, immediate action is required. Spill kits are to be available close to the patient/client care area when a hazardous drug is administered. Spill kits can be obtained from the Most Responsible Unit.

12. Staff will document hazardous spills or any other adverse event on an *Unusual Occurrence Form.*

PROCEDURE

1. Preparation and Administration of medication

1.1 Oral medication (pills, tablets, capsules)

1.1.1 Wash your hands.

1.1.2 Dispense oral medication into a pill cup or give directly to the client from the pouch taking care to avoid touching the medications.

1.1.3 Put on nitrile gloves if you need to touch the medication.

1.1.4 Wash your hands.

Note**:** Clean the pill crusher with detergent and water if it has been used to crush pills without a protective plastic bag.

1.2 Injectable and liquid preparations

1.2.1 Prepare the work area, covering with a disposable protective field (e.g., blue pad).

1.2.2 Put on nitrile gloves. Use a closed front, long sleeved, fluid resistant gown with cuffs, and eye protection when splashes are a risk. If crushing pills is required, use a respirator.

Note: Change contaminated clothing immediately and dispose of personal protective equipment into a biohazard container if a splash occurs on a uniform or gown.

1.2.3 Discard sharps into a biohazard waste container immediately following administration of the medication. Place non-sharp contaminated materials (gloves, medication cups) in a yellow biohazard bag or container.

1.2.5 Wash hands with soap and water.

2. Spills/Splashes on Unprotected Skin

2.1 Put on single nitrile gloves.

2.2 Remove contaminated linen and clothing immediately and dispose of, if possible. If disposal is not practical, place items into a bag and send to the laundry.

2.3 Wash skin with soap and water and rinse for 15 minutes with large amounts of water **avoiding the spread** of contaminants to other areas of the body.

2.4 Report the accident immediately to the most responsible person in the unit/area.

3. Spills/Splashes into the Eye

3.1 Wash the drug from the eyes immediately with large amounts of saline or running water for at least 15 minutes. Note: Remove contact lenses if worn.

3.2 Report the accident immediately to the most responsible person in the unit/area.

3.3 Seek first-aid or medical attention as required.

4. Small Spills (less than 5 ml.)

4.1 Put on single nitrile gloves.

4.2 Remove contaminated linen and clothing immediately. If disposal is not practical, place items into a bag for transport to the laundry.

4.3 Wash contaminated skin with soap and water and rinse for 15 minutes with large amounts of water avoiding the spread of contaminants to other areas of the body.

4.4 Keep people away from the spill area.

4.5 Place the absorbent pad over the spill (plastic side up) being careful not to generate mists or aerosols.

4.6 Allow the pad to absorb the liquid.

4.7 Slowly lift the pad from the spill and place in a biohazard container. Do not squeeze pads or allow contamination to the outside of the container.

4.8 Wash the contaminated area thoroughly with detergent and water. Start with the least contaminated area and move to the most contaminated area. Dry the area with a clean dry towel.

4.9 Remove gloves and place them in a leak-proof biohazard waste container.

4.10 Seal the container.

4.11 Wash hands with soap and water.

4.12 Contact Housekeeping to request a thorough general cleaning of the spill area.

5. Large Spills (greater than 5 ml)

5.1 Isolate the area and keep people away from the spill.

5.2. Ask a co-worker to obtain the spill kit from the most responsible unit.

5.3 Do not leave the spill unattended.

5.4 Clean up the spill using the equipment in the spill kit and dispose of the contaminated items.

5.5 Wash hands with soap and water.

5.6 Contact Housekeeping to request a thorough general cleaning of the spill area.

5.7 Order a replacement spill kit from Purchasing.

6. Handling of Body Waste

6.1 Check the *Care Plan* before providing client care.

6.2 Use single vinyl gloves for handling body waste for 48 hours following the last dose of cytotoxic medication.

6.2 Clients taking Cyclophosphamide require handling precautions for 72 hours. Consult Pharmacy for specific advice.

6.2 Clients able to use the toilet or commode can continue to do so. Dedicate a commode to the client whenever possible for 48 hours following the last dose of cytotoxic medication (72 hours for clients on Cyclophosphamide). Body waste can be flushed down the sewer system. Follow the guidelines in CS-06-03-04 for disinfecting bedpans.

6.3 Dispose of incontinence products contaminated with urine or feces in a biohazard container. This waste is garbage and requires special handling to minimize impact on the environment.

6.4 Place contaminated laundry in laundry bags as usual. The normal laundering processes are sufficient to minimize the risk to staff and the environment. Minimize handling of soiled laundry as much as possible.

6.5 Place contaminated items that will be handled by the client's family in a plastic bag.

APPENDIX 1

PERSONAL PROTECTIVE EQUIPMENT

	Gloves	***Gloves, Nitrile***	***Gown***	***Face Protection***	***Respirator***	***Underpad***
	Vinyl non-sterile	Blue or purple	Fluid resistant, closed in the back, long sleeves with cuffs.	Face Shield or safety glasses or goggles	N95 Respirator	Blue absorbent pad
Preparation and Administration		Single gloves	Use if a splash is a possibility	Use if a splash is a possibility	Yes, if splitting or crushing pills, opening capsules or reconstituting powders	Yes, to protect the surface and absorb minor spills, for liquid preparations and injectables
Spill Clean-Up		Yes	Yes	If a splash is a possibility	Yes	Yes
Waste Disposal	Single gloves for 48 hours after the last dose of medication except for Cyclosphosphamide		Recommended	If a splash is a possibility	No	
Laundry	Single gloves		If chance of contaminating clothing exists.	Not usually	No	No

Waste Disposal

Sharps
(Contaminated or not contaminated)

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Yellow biohazard sharps container

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Pick up and disposal by Housekeeping (must be sealed for pick-up)

Garbage
(Contaminated with urine or feces)

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Green garbage bag

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Place green garbage bag in a yellow biohazard container (bag or pail). Pick up and disposal by Housekeeping (must be sealed for pick-up).

Laundry
Place contaminated bed linens, wash cloths (etc.) in laundry bags for transport to off-site laundry.

Personal Laundry - (Family)
Place contaminated clothing and personal items in a plastic bag for the family to take home.

Personal Laundry - (Facility Laundry Fee)
Place contaminated clothing and personal items in a laundry bag for on site processing.

CROSS REFERENCES

- Hazardous Drug Handling in Pharmacy PM-03-01-13

REFERENCES

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